

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A cable modem tuner comprising an upstream circuit for transmitting a data signal to a CATV (cable television) station, wherein

said upstream circuit includes

a gain controllable gain control circuit receiving said data signal,

At at least one power amplifying circuit power-amplifying the data signal having been gain controlled by said gain control circuit, and

a control circuit for controlling transmission/interruption of said data signal.

2. (currently amended) A cable modem tuner comprising a receiving unit for receiving a down signal from a CATV (cable television) station, wherein

said receiving unit includes

an up converter for converting said down signal to a first intermediate frequency signal of ~~lower~~ higher frequency,

a SAW filter for selecting the first intermediate frequency signal output from said up converter, and

a down converter converting the first intermediate frequency signal selected by said SAW filter to a second intermediate frequency signal of lower frequency for output, and

said SAW filter is formed of an oscillation circuit including a print coil or an air core coil.

3. (original) The cable modem tuner according to claim 2,
wherein

said up converter includes

a broadband high frequency amplifying circuit having a reception
frequency band, for amplifying said down signal,

a gain variable broadband variable gain amplifying circuit
receiving the down signal from said broad band high frequency
amplifying circuit,

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Out a local oscillation circuit outputting a local oscillation
signal having higher frequency than said down signal, and

a mixer circuit mixing the down signal output from said
broadband variable gain amplifying circuit with the local oscillation
signal output from said local oscillation circuit.

4. (original) The cable modem tuner according to claim 2,
wherein

said down converter includes a first intermediate frequency
amplifying circuit amplifying the first intermediate frequency signal
selected by said filter,

a local oscillation circuit outputting a local oscillation
signal having lower frequency than said first intermediate frequency
signal,

a mixer circuit mixing the first intermediate frequency signal
output from said first intermediate frequency amplifying circuit with
the local oscillation signal output from said local oscillation
circuit and outputting a second intermediate frequency signal,

a second intermediate frequency amplifying circuit amplifying the second intermediate frequency signal output from said mixer circuit, and

a filter for selecting said second intermediate frequency signal output from said second intermediate frequency amplifying circuit.

5. (original) The cable modem tuner according to claim 4, further comprising

a gain variable intermediate frequency gain amplifying circuit receiving the second intermediate frequency signal from said second intermediate frequency amplifying circuit.



6. (canceled)

7. (currently amended) A cable modem tuner including an upstream circuit for transmitting a data signal to a CATV (Cable Television) station and a receiving unit for receiving a down signal from said CATV station, comprising:

a duplexer for branching the data signal to said CATV station and the down signal from said CATV station;

a return pass circuit outputting said data signal to said duplexer; and

a receiving unit receiving the down signal branched by said duplexer, wherein

said receiving unit includes

an up converter for converting said down signal to a first intermediate frequency signal of higher frequency,

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a SAW filter for selecting the first intermediate frequency signal
output from said up converter, and

a down converter converting the first intermediate frequency signal
selected by said SAW filter to a second intermediate frequency signal of
lower frequency for output, and

said SAW filter is formed of an oscillation circuit including a
print coil or an air core coil.
